



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Ian David Kaehne

SERIAL NO. 10/509,803

GROUP: 1761

FILED: March 30, 2004

EXAMINER: Helen F Pratt

DECLARATION SUBMITTED UNDER 37 C.F.R. § 1.132

Honorable Commissioner
of Patents and Trademarks
Washington, D.C. 20231

Sir:

I, Neil Thomas Paulett, do hereby declare the following:

1. I reside at Polish Hill River Road, Sevenhill, South Australia, 5453, Australia.
2. I have a Diploma of Agricultural Science awarded from Longernong Agricultural College, Victoria, Australia. I have a Diploma in Oenology awarded by Roseworthy Agricultural College of South Australia, Australia.
3. I commenced working for Penfolds Wines becoming winemaker/manager at Wybong Estates winery in the Upper Hunter valley of New South Wales, Australia.
4. I established Paulett Wines in 1982 in Sevenhill via Clare, South Australia, Australia, and have continued that business from that time. Our internet web site at <http://www.paulettwines.com.au/index.html> shows more details of my history in winemaking.

5. As a winemaker I have a long history of discerning flavours in wines and in assessing parameters that make up taste components in wines. In early 2002, Dr Ian Kaehne the applicant in the present patent application approached me to trial in a blind tasting several variations of the manufactured mineral water subject of present application. I understand I was one of a number of individuals used by Dr Kaehne to trial variations of the manufactured mineral water. The scheme for assessing taste components of minerals waters is not that dissimilar to that for tasting wines, albeit that the nature of several of the components is different. The results of this testing are shown in table 2 of the present patent specification.
6. I have recently been approached by Dr Kaehne to blind test a number of commercially available mineral waters and compare them to a formulation of Dr Kaehne has now informed me was made in accordance with example 22 of the present patent application.
7. I conducted the tastings on Friday December 5th 2008. I commenced by rinsing my mouth with pure water, and tasting the first sample. Rinsing my mouth again, and allowing a few minutes before tasting the second. One mineral water in particular, that I now know to be "Aqua Panna" had a very strong flavour and had to rest my mouth for about ten minutes before proceeding to the next water. Only after the tastings did Dr Kaehne reveal to me the identity of the mineral waters.
8. I recorded the results of the assessment of my tasting on photocopies of Table 1 of the present application. Exhibited hereto as NTP-1 as a bundle are true copies of the results recorded.

I have taken each of the scores as a continuum, so that, for example with respect to Panna Aqua for mouthfeel sensation I have scored that as acceptable, however it is not absolutely ideal, if it had been ideal I would have marked the taste

parameter centrally. Similarly Palate persistence is scored as too extended, the score is at the less desirable level of "too extended" and bordered on being "persistent". The results scored are thus to a degree graphic.

I also placcd some notes in the side column as follows

Evian taste component 4 "lime, soapy characters persist"

Malvern taste component 3 "lacking mid palate"

Poland Springs	taste component 3 "soapy back palate"
	taste component 4 "no mid palate"

9. Copies of labels of bottles tasted showing the analysis or composition as far as published are exhibited hereto as NTP-2. A table of the summary of composition of the Mineral waters tasted as far as published is also exhibited to NTP-2.
10. None of the commercially available mineral waters tested had all eight taste components within the "acceptable" taste score, and some had very strong off flavors.
11. Mineral Water made in accordance with example 22 of this invention is not of an absolutely ideal flavour, and this is reflected in the scoring sheet for that water, because the score is not centrally located within the "acceptable" taste score. This I am pleased to say accorded with the score that the panel of tasters awarded it in 2002. This speaks to the repeatability of the eight taste components as a means of providing objectivity to the tasting process. In my view given the taste component scheme devised by Dr Kaehne assessment of taste of a mineral water is repeatable.

The undersigned declares that all statements made herein based upon knowledge are true, and that all statements made used upon information and believe are believed to be true, and further, that these statements are made with the knowledge that wilful false statements and the like so made are punishable by fine or imprisonment, or both under section 1001 of Title 18 of the United States Code, and that such wilful false statement may jeopardise the validity of the application or any patent issued therein.

Dated: 8th Dec 2008

Neil Paulett

Neil Thomas Paulett

Exhibit NTP-1

Table 1 Taste components for testing formulations of mineral water.

Example 22

EXAMPLE 22

Rating of Taste Components					
Taste Components					
Qualitative Rating Description					
1.	<i>Initial sensation upon intake (0 – 2 seconds)</i>				
	none	weak	acceptable	too strong	repulsive
2.	<i>Mouthfeel sensation (2 – 15 Seconds)</i>				
	none	weak	acceptable	too strong	repulsive
3.	<i>Palate balance characteristics (while tasting)</i>				
	back only	predominantly back	balanced	predominantly front	front only
4.	<i>Palate persistence characteristics (after swallowing)</i>				
	no persistence	dissipates quickly	acceptable	too extended	persistent
5.	<i>Acidity/Alkalinity</i>				
	very acid/sour	acid	acceptable	too alkaline	soapy
6.	<i>"Earthy" (lime, calcic, magnesian) characteristics</i>				
	absent	too weak	acceptable	too strong	excessive
7.	<i>'Saltiness' sensation characteristics</i>				
	absent	too weak	acceptable	too strong	very saline
8.	<i>'Mineral' sensation characteristics</i>				
	absent	too weak	acceptable	too strong	metallic

Table 1 Taste components for testing formulations of mineral water.

AQUA PANNA

Rating of Taste Components					
Taste Components					
Qualitative Rating Description					
1.	<i>Initial sensation upon intake (0 – 2 seconds)</i>				
	none	weak	acceptable	too strong	repulsive
2.	<i>Mouthfeel sensation (2 – 15 Seconds)</i>				
	none	weak	acceptable	too strong	repulsive
3.	<i>Palate balance characteristics (while tasting)</i>				
	back only	predominantly back	balanced	predominantly front	front only
4.	<i>Palate persistence characteristics (after swallowing)</i>				
	no persistence	dissipates quickly	acceptable	too extended	persistent
5.	<i>Acidity/Alkalinity</i>				
	very acid/sour	acid	acceptable	too alkaline	soapy
6.	<i>"Earthy" (lime, calcic, magnesian) characteristics</i>				
	absent	too weak	acceptable	too strong	excessive
7.	<i>'Saltiness' sensation characteristics</i>				
	absent	too weak	acceptable	too strong	very saline
8.	<i>'Mineral' sensation characteristics</i>				
	absent	too weak	acceptable	too strong	metallic

Table 1 Taste components for testing formulations of mineral water.

EVIAN

Rating of Taste Components					
Taste Components					
Qualitative Rating Description					
1.	<i>Initial sensation upon intake (0 –2 seconds)</i>				
	none	weak	acceptable	too strong	repulsive
2.	<i>Mouthfeel sensation (2 – 15 Seconds)</i>				
	none	weak	acceptable	too strong	repulsive
3.	<i>Palate balance characteristics (while tasting)</i>				
	back only	predominantly back	balanced	predominantly front	front only
4.	<i>Palate persistence characteristics (after swallowing)</i>				
	no persistence	dissipates quickly	acceptable	too extended	persistent
5.	<i>Acidity/Alkalinity</i>				
	very acid/sour	acid	acceptable	too alkaline	soapy
6.	<i>"Earthy" (lime, calcic, magnesian) characteristics</i>				
	absent	too weak	acceptable	too strong	excessive
7.	<i>'Saltiness' sensation characteristics</i>				
	absent	too weak	acceptable	too strong	very saline
8.	<i>'Mineral' sensation characteristics</i>				
	absent	too weak	acceptable	too strong	metallic

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characteristics
position

Table 1 Taste components for testing formulations of mineral water.

MALVERN

Rating of Taste Components					
Taste Components		Qualitative Rating Description			
1.	Initial sensation upon intake (0 –2 seconds)				
	none	weak	acceptable	too strong	repulsive
2.	Mouthfeel sensation (2 – 15 Seconds)				
	none	weak	acceptable	too strong	repulsive
3.	Palate balance characteristics (while tasting)				
	back only	predominantly back	balanced	predominantly front	front only
4.	Palate persistence characteristics (after swallowing)				
	no persistence	dissipates quickly	acceptable	too extended	persistent
5.	Acidity/Alkalinity				
	very acid/sour	acid	acceptable	too alkaline	soapy
6.	"Earthy" (lime, calcic, magnesian) characteristics				
	absent	too weak	acceptable	too strong	excessive
7.	'Saltiness' sensation characteristics				
	absent	too weak	acceptable	too strong	very saline
8.	'Mineral' sensation characteristics				
	absent	too weak	acceptable	too strong	metallic

X
P. G. 10/10
10/10/10

Table 1 Taste components for testing formulations of mineral water.

POLAND SPRINGS

Rating of Taste Components					
Taste Components					
Qualitative Rating Description					
1.	<i>Initial sensation upon intake (0 – 2 seconds)</i>				
	none	weak	acceptable	too strong	repulsive
2.	<i>Mouthfeel sensation (2 – 15 Seconds)</i>				
	none	weak	acceptable	too strong	repulsive
3.	<i>Palate balance characteristics (while tasting)</i>				
	back only	predominantly back	balanced	predominantly front	front only
4.	<i>Palate persistence characteristics (after swallowing)</i>				
	no persistence	dissipates quickly	acceptable	too extended	persistent
5.	<i>Acidity/Alkalinity</i>				
	very acid/sour	acid	acceptable	too alkaline	soapy
6.	<i>"Earthy" (lime, calcic, magnesian) characteristics</i>				
	absent	too weak	acceptable	too strong	excessive
7.	<i>'Saltiness' sensation characteristics</i>				
	absent	too weak	acceptable	too strong	very saline
8.	<i>'Mineral' sensation characteristics</i>				
	absent	too weak	acceptable	too strong	metallic

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Table 1 Taste components for testing formulations of mineral water.

FISI

Rating of Taste Components					
Taste Components					
Qualitative Rating Description					
1.	<i>Initial sensation upon intake (0 – 2 seconds)</i>				
	none	weak	acceptable	too strong	repulsive
2.	<i>Mouthfeel sensation (2 – 15 Seconds)</i>				
	none	weak	acceptable	too strong	repulsive
3.	<i>Palate balance characteristics (while tasting)</i>				
	back only	predominantly back	balanced	predominantly front	front only
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	no persistence	dissipates quickly	acceptable	too extended	persistent
5.	<i>Acidity/Alkalinity</i>				
	very acid/sour	acid	acceptable	too alkaline	soapy
6.	<i>"Earthy" (lime, calcic, magnesian) characteristics</i>				
	absent	too weak	acceptable	too strong	excessive
7.	<i>'Saltiness' sensation characteristics</i>				
	absent	too weak	acceptable	too strong	very saline
8.	<i>'Mineral' sensation characteristics</i>				
	absent	too weak	acceptable	too strong	metallic

Table 1 Taste components for testing formulations of mineral water.

Rating of Taste Components					
Taste					
Components	Qualitative Rating Description				
1.	<i>Initial sensation upon intake (0 – 2 seconds)</i>				
	none	weak	acceptable	too strong	repulsive
2.	<i>Mouthfeel sensation (2 – 15 Seconds)</i>				
	none	weak	acceptable	too strong	repulsive
3.	<i>Palate balance characteristics (while tasting)</i>				
	back only	predominantly back	balanced	predominantly front	front only
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	very acid/sour	acid	acceptable	too alkaline	soapy
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	absent	too weak	acceptable	too strong	excessive
7.	<i>'Saltiness' sensation characteristics</i>				
	absent	too weak	acceptable	too strong	very saline
8.	<i>'Mineral' sensation characteristics</i>				
	absent	too weak	acceptable	too strong	metallic

Exhibit NTP-2

THE GOOD WATER GUIDE

The world's best
bottled waters

Maureen & Timothy Green



Rosendale Press

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 Printed by: Arcata, Kingsport Press, Kingsport, Tennessee.

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Poland Spring

The clear, cool waters of Poland Spring, tucked away amid the woods and lakes of Maine, have been known for over a century. But their distribution on a grand scale, in still and carbonated form, has taken place only in the last few years after the spring came under the umbrella of Perrier's American company, Great Waters of France, in 1980. Today Poland Spring is marketed not just in New England, but as far afield as Las Vegas, where it is regularly served (free) with Scotch whisky to gamblers in the casinos.

The legends surrounding the spring's original discovery centre on the Ricker family who owned an inn at South Poland, Maine, from 1797. Various family members found the local spring helped their ailments, but it was not until 1844 that Hirman Ricker began to tout its virtues for easing his chronic dyspepsia. Soon the whole neighbourhood vowed Poland worked wonders for them too. Ricker took to advertising that the water 'Cures Dyspepsia! Cures Liver Complaints of Long Standing! Cures Gravel! Drives out all humors and Purifies the blood.' He built a granite and marble spring house with a mosaic floor inlaid with the words *Sapientia Donum Dei* (Wisdom is the gift of God). Alongside he installed a bottling plant, surmounted by a tall tower, which was to be used for over a century. And Poland Spring water was soon being widely distributed. A little way off in the woods Ricker then put up a five-storey 100-room resort hotel with gilded turrets and domes. Before long he added a golf course. American and European socialites came to Poland in droves in the late nineteenth century, and for a while it rivalled Saratoga Springs as a fashionable spa. But the age of spas declined, and so did Poland's fortunes. The Ricker family, however, kept on bottling until 1946, when they sold the spring. Thereafter for nearly thirty years less than 100,000 cases were bottled annually. Attempts to revive Poland as a spa came to little and were finally shattered when the grand hotel was destroyed by fire in 1975.

The growing bottled water boom, however, suddenly provided a fresh lease of life. Perrier's Great Waters of France, eager to get a foothold with a local American water, purchased the spring, and opened a

modern bottling plant in 1980 downhill from the original spring house. Then two other springs on the 400-acre estate were tapped too. The original Poland Spring had a modest flow of only 8 US gallons (30 litres) a minute emerging from the granite hillside, but just 40 feet away another spring of identical composition flowing at 12 US gallons (45 litres) a minute was located. The combined flow of these two springs is normally enough to meet the bottling plants' needs, because the water can be stored at night and on weekends in stainless steel storage tanks holding 55,000 US gallons (208,000 litres). A reserve third spring has also been found in the woods nearby; this has been drilled down to 19 feet (6 metres) and can be used sparingly in peak seasons. Although the waters are exceptionally pure and have a very low mineralization of 46 mg per litre, they are filtered for sediment and passed before ultraviolet light to eliminate bacteria.

Poland Spring is packaged in 6-gallon, 2.5-gallon



By original spring house, Ernie Bilodeau checks flow of a new spring.

Bottling company:
Poland Spring Bottling
Company
P O Box 499
Poland Spring
Maine
USA

Owned by Great Waters
of France, the United
States arm of Perrier.

Analysis	mg/l
Sodium	3.0
Magnesium	1.6
Nitrates	0.5
Sulphates	2.5
Bicarbonates	24.0
Iron	0.05

and 1-gallon plastic containers, and three sizes of smaller glass bottles. More than half of the glass bottles are carbonated with 4.12 grams per litre of CO₂. Poland is also available with natural essence flavours in cherry, lemon, lime and orange. The success of Poland's new expansion was confirmed in April 1985 when Perrier's president Gustave Leven travelled from Paris to Poland to break the ground for a second bottling plant.

Production: 9 million US gallons (34 million litres) annually.



NATURAL MINERAL WATER

TYPICAL ANALYSIS (mg/l)	
BICARBONATE	HCO_3^- 108.0
CALCIUM	Ca^{2+} 33.0
SULPHATE	SO_4^{2-} 21.1
CHLORIDE	Cl^- 9.1
SILICA RESIDUE	SiO_2 7.2
MAGNESIUM	Mg^{2+} 6.7
SODIUM	Na^+ 6.3
NITRATE	NO_3^- 4.3
POTASSIUM	K^+ 0.9
pH at the source	
	8.1

Store in a cool, dry
and odourless place, away from
direct sunlight. Do not freeze.

Bottled at the source
Parma Springs, Scarperia
(Florence), Italy
by Santelegrino S.p.A.
Via Lodovico il Moro, 35
20143 Milan, Italy

BEST BEFORE END

01.2009 02

L7011087703

COMPOSITION in mg/Litre	
BICARBONATES	357
SULPHATES	45
SODIUM	7.8
CHLORIDES	24
NITRATES	13.5
POTASSIUM	
SILICA	

Store in a clean, dry and cool place. Net 10 to 12 gms.

Bottled at the Cachet spring, S.A.E.M.E.

14500 Evian (FRANCE).

IMPORTED IN AUSTRALIA BY:

Fraser Beverages Pty Ltd NSW 2116

13 South Street, Rydalmere.

Permed Ricard Australia Pty Ltd

16 Byfield Street, North Ryde, NSW 2113

IMPORTED IN NEW ZEALAND BY:

Fraser Beverages Limited

86 Plunket Avenue, Wied, Auckland

Permed Ricard New Zealand Ltd

171 Pillingham Rd, Auckland 1073

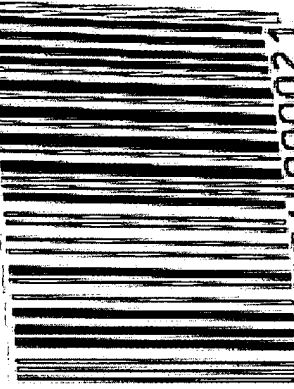
clouds. Our rainfall is purined by trade winds as it travels thousands of kilometres across the Pacific Ocean to the islands of Fiji. A continent away from acid rain and other pollutants, FIJI Water is preserved and protected by one of the last virgin ecosystems on Earth.

www.fijiwater.com.au

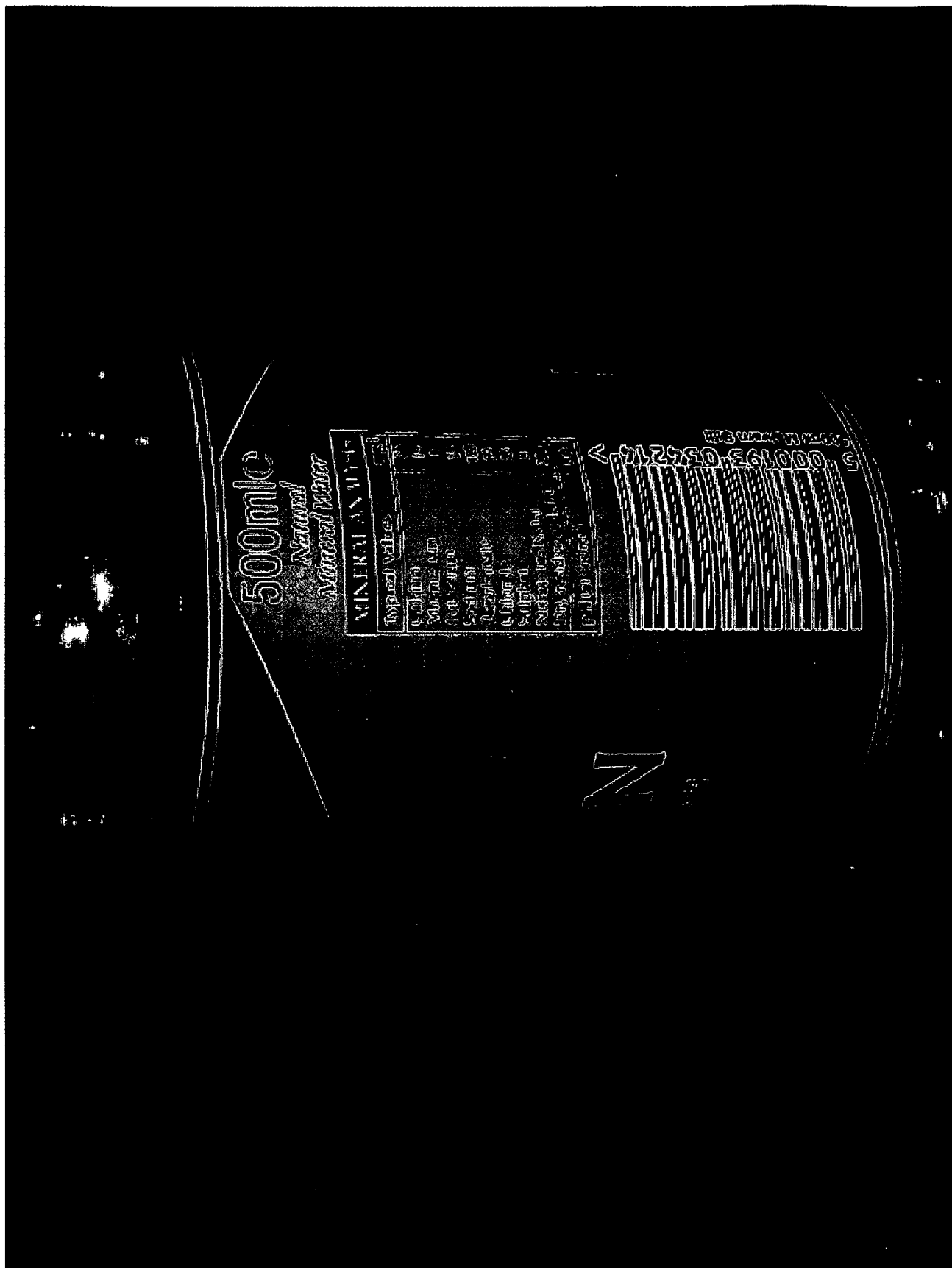
Typical Analysis in mg/litre:

Silica	85	pH	7.5
Calcium	17.	Bicarbonates	100
Magnesium	13	Total Dissolved Solids	210

Sources: Vepco, Fiji.
Imported by: FIJI Water
Australia Pty Ltd Suite 9,
25 Commercial St, South Yarra,
VIC 3141 Australia
PRODUCT OF FIJI
Fiji Water Co.
1.000.000.443
50 Refillable Co. Lotion
Distribution only in SA



9 417574 000021



Composition of Mineral Waters that were Assessed

Group		Aqua Panna	Evian	Malvern	Poland Springs	Fiji	U	Example 22
A	Ca	33	78	35		17	3	55 mg/L
	Mg	6.7	24	19	1.6	13	1.4	12
B	P							30
	K	0.9		1				120
	Si	7.2 ³	13.5 ²			85 ¹	93.4 ²	0.8
	Na	6.3	5	15	3			8
	Cl	9.1	4.5	39				9
C	B							19 ug/L
	Cr							0.1
	Co							0.1
	Cv							4
	I							1
	Li							0.4
	Mn							0.4
	Mo							0.5
	Ni							0.1
	Se							35
	Sn							0.4
	V							0.03
	Zn							25
D	Fe				50			5

1 Silica if the indicative measure is for SiO_2 or SiO_3^- then respective silicon levels would be 40 and 31 or if Na_2SiO_3 N would be 32 and Si 20..

2. Silica (same as for 1)

3. Silica residue is SiO_2 therefore Si = 3.4 exceeding claims